BASIC QUERY FOR HRMS - VERSION 9.1

SELF-STUDY GUIDE

2011

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QUERY OVERVIEW

Objectives

By the end of this chapter, you will be able to:

- Understand what is meant by basic database terms

- Understand the basics of the Query reporting tool

- Understand Query output options

- Understand uses for HRMS queries

Overview

The purpose of this course is to provide you with the basic skills you need to run and build queries using PeopleSoft's Query reporting tool.

In this chapter you will be introduced to Query, including Query output options and uses for queries.

In Chapter 2, you will see how to build a simple query by selecting a record and specific fields. You will also modify column headings and reorder your output.

In Chapter 3, you will use selection criteria to obtain precisely the information you need for your ad hoc queries.

What Do We Mean By … ?

Database	A database is a bank of related data. Each unit, or record, is made up of one or more data fields. Each data field can hold one piece of data, or value.
Record	In a database, a record is a complete set of related information, like an electronic file folder. Each record contains one or more data fields. For example, in the HRMS database, the PERSONAL_DATA record stores personal information about an employee, such as birth date, address, and telephone number. Data from an individual record is displayed as a row of data on a columnar report.
Data Field (Field)	A data field is the smallest element of a record. A field holds one piece of data, or value. There are a myriad of fields in the HRMS database. Examples of field names are EMPLID, NAME, ORIG_HIRE_DT, and EMPL_STATUS.
Value (Field Value)	A value is the actual data found in a field. In the Ethnic Group field, for example, the Translate Codes are 1 through 7 for the Translate Values, White through Hawaiian, respectively. Short and long translate values will be discussed later in this guide.

Field = **ETHNIC GROUP**		
Translate Code:	**Short Translate Value:**	**Long Translate Value:**
1	White	White
2	Black	Black/African American
3	Hispanic	Hispanic/Latino
4	Asian	Asian
5	Am. Indian	American Indian/Alaska Native
6	Not Specified	Not Specified
7	Hawaiian	Native Hawaiian/Oth Pac Island

Relational Database	In a relational database, data is organized in a system of rows and columns. The rows, which run horizontally across the page, are called records. The columns, which run up and down the page, are called fields. Records and fields are stored in a database table. Often, data stored in two different tables can be related by their common field, such as EMPLID. In this course, you will learn to build queries based upon just one table.
Table	Records and fields are stored in a database table. Records listed in a Query tree may represent either a table or a view.

- A **table** physically stores specific data. There are many tables; examples *a*re JOB and EMPLOYEE.

- A **view** is a logical representation of data and may consist of data from multiple tables, depending on how the record was defined by systems analysts. Additionally, views may already have criteria associated with them. Examples of views are *Y_ACCT_CD_LKUP* and *Y_EMPL_BIG_VW*. *(Notice the **VW** extension on some views.)*

Query	A query is a request for information from a database. You can retrieve the precise data you want and direct the output to a Grid Control (Grid), an Excel spreadsheet, or a Crystal Report.
Report	A report is an organized presentation of data. Reports help an organization's management team make decisions.

Query Overview

This class will introduce you to Query, a tool that enables you to create queries, or requests for information, from a database. You can extract the precise data you want from the HRMS database.

Queries can assist City employees with all kinds of decisions and reporting requirements. They can be as simple or as complex as necessary, and they can be one-time queries or queries you will use repeatedly.

Query is read-only, meaning that you will not be able to change the actual data stored in the database.

Query Purposes

Query is a powerful tool used to create queries for a variety of purposes, among them, these:

Results Grid:	**To display data in a grid (from the Run tab).**
	Preview queries within Query Manager and Query Viewer, displaying the result set in a grid for review. This option is useful as you refine your queries.

Spreadsheet:	**To download query results to an Excel spreadsheet.**
	Choose to have the data downloaded and formatted as a Microsoft Excel spreadsheet. This option is available in your query search results or after you Preview or Schedule a query.

*HTML:	**To download query results in an HTML format.**
	Choose to generate an HTML version of the query. *Available from the Query Manager Search Results page.

Selecting Records and Fields

You will learn the basic functions of Query and how to create a simple query by selecting a record and specific fields. You will learn how to modify column headings and how to retrieve the short or long description for a translate value, rather than the code.

Entering Selection Criteria

Once you know the basics, you will learn how to retrieve information based on criteria requirements such as equal to, greater than, in list, between, and like.

Creating Run-time Prompts

You will also be introduced to run-time prompts. Run-time prompts give you the ability to enter specific values for a designated field at the time that a report is run. These values are then used as criteria for retrieving the information for your report.

Ordering Output

Ordering output is very important to the readability of your reports. You will learn how to change your column headings and sort your output.

Using Simple Functions

What is a report without subtotals and grand totals? Implementing these functions as well as other summarized functions will be covered in Chapter 3.

Query is a powerful and useful tool!

Query Output Options

You may direct query output to a Grid, to Excel, to HTML or XML. XML is not used by the City at this time. You will use the Grid output option throughout this course.

```
                    ┌──────────────────────────┐
                    │  PeopleSoft Query Output │
                    └──────────────────────────┘
        ┌──────────────────────────┐          ┌──────────────┐
        │ View via Grid on Screen  │          │  Run to XML  │
        └──────────────────────────┘          └──────────────┘
```

Run to XML	Download to Excel
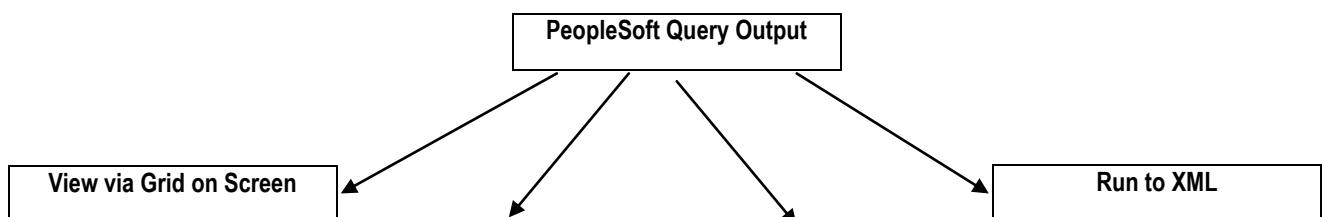
* From the Query Manager Search Results page.

Spreadsheet

Use the Run to Excel option when you wish to carry out these tasks:

- Generate output for further analysis

- Create charts or graphs of the data

- Work with data in a spreadsheet format

-

Public vs. Private Queries

- Queries can be saved as Public or Private. Most individuals in the City can save queries as private only. The ability to create public or private queries is controlled through the Query Security Profile. The "owner" of the query is designated at the time that you save a query.

Public Queries

Any user with access to the records used by the query can run, modify, or delete the query (if he or she has access to public queries).

Private Queries

Private queries are attached to User IDs. When you log in with your own User ID, you are the only one who can open, run, modify, or delete your private queries.

If you wish to use a public query as the basis of a query of your own, first open the public query, then save it with a new name, using the **Save As** hyperlink. You can then make changes to your new private query.

About the File Structure

To effectively design reports, you need a fundamental understanding of the structure of the application for which you will be producing reports. In this course, we will run and create queries based on the City of Milwaukee's HRMS database.

The focus of this class is on the basic features and functions of the Query program. There are many, many tables in the HRMS database. Listed below are the most useful tables and what each contains.

Here is a very brief description of the some of the useful PeopleSoft tables:

EMPLOYEES

The EMPLOYEES table is a very useful table that contains *current* information for employees in a payable status.

Notes:
- Data for employees who are off payroll is not stored here.
- Employees' names are in this format: FNAME, LNAME

PERSONAL_DATA

The PERSONAL_DATA table contains personal information for every employee ever entered into HRMS.

Notes:
- PERSONAL_DATA is not effective-dated and does not include a status indicator for employees (i.e., Active, Retired, etc…).

PERS_DATA_EFFDT

The PERS_DATA_EFFDT table is an effective dated personal data table.

NAMES

The NAMES table is an effective dated personal data table.

ADDRESSES

The ADDRESSES table is an effective dated personal data table.

JOB

JOB, which is effective-dated, contains all of the information about a given appointment. The employee name field is not included in the JOB table; however, the EMPLID field is included.

Y_EMPLOYEES_VW

Y_EMPLOYEES_VW is a view that contains many of the fields that you will need for queries. It is effective-dated.

To learn more about some of the key tables used in Query, visit the City of Milwaukee's MINT (Milwaukee Intranet).

- Click on **FMIS/HRMS**.
- Click on **Query Table Definitions**, found under **FAQs** (Frequently Asked Questions).
- Next click on **HRMS**.

There you will find table definitions for these tables:

- Employees
- Job
- SAL GRADE
- SAL STEP
- Y_EMPLOYEES_VW

Chapter Key Points

- A database is a bank of related data. Each database record is made up of one or more data fields. In turn, a data field holds one value – the actual data.

- A query is a request for information from a database.

- You can retrieve the data you want and direct the output to a Grid (using the **Run** tab), an Excel Spreadsheet or an HTML display.

  - Use the Grid Control output option when you want a quick and easy display of your Query results.

  - Use an Excel spreadsheet when you wish to manipulate and analyze data.

- Most individuals in the City can save queries as private only.

  - However, if a query is public, all users who have security access to the records referenced by the query can go ahead and run it.

- Of the many, many tables in HRMS, these are among those that will be used to create general queries in this course: EMPLOYEES, PERSONAL_DATA, PERSONNEL, PERSONNEL_HIST, JOB, and Y_EMPLOYEES_VW (which is not a table, but a view).

C H A P T E R   2

RUNNING AND BUILDING QUERIES

Objectives

By the end of this chapter, you will be able to:

- Access Query and open an existing query

- Run pre-defined queries and view the results online

- Build queries, selecting records and fields for output

- View and modify headings

- Save and print queries

- Change column order

- Sort fields

Overview

In this chapter, you will learn some of the basic concepts and features of Query, such as how to access Query, run and create a query, display your Query field definitions, and manipulate data in your query.

A Note About This Course Guide
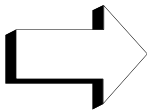
Throughout the course guide, the arrow shown to the left indicates that you should carry out the task described in the text.

Running Pre-defined Queries

Use the navigation shown here – Main Menu > Reporting Tools > Query > **Query Manager** – to run a pre-defined query from HRMS. You are presented with a search page that defaults to the Find an Existing Query view of the page. To list the first 300 queries to which you have access, click the **Search** button.

Private queries are listed first, in alphabetical order. *Note*: Queries beginning with "Y" are custom queries created especially for the City.

Note: For future reference, from the Query Manager page you may also perform the following actions by accessing the Actions drop-down list:

- Add a query to your <u>Favorites</u>
- Copy a query to another user
- Delete a query
- Move a query to a folder
- Rename a query
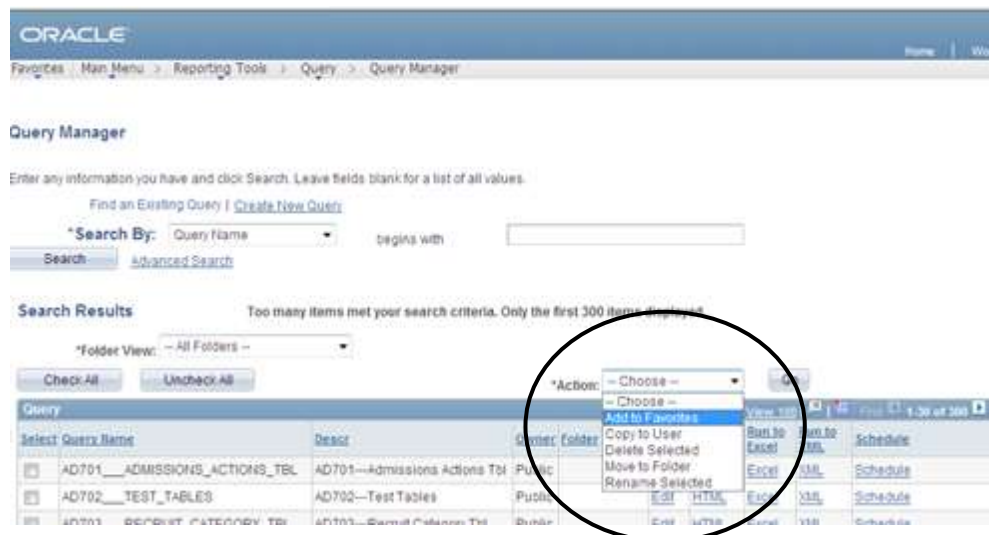
The first example that you will look at is called **Y_EMPLOYEES_VW.**

Click the down arrow in the Search By box and click Uses Record Name option. Type Y_EMPLOYEES_VW in the *begins with* field, and click **Search.**

Scroll down the list of queries. You have several options pertaining to queries:

- Edit
- Run to HTML
- Run to Excel
- Run to XML, or
- Schedule
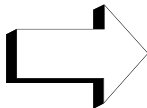
Locate **Y_NEW_HIRES_SINCE_MMDDYY** Choose HTML. A new window will open, and you will see a dialog box for entering query parameters. Each query will have different required parameters to enter before you can run the query.

For this example,the Hire Date are required to run the query. Other queries will require different information. In this case the Hire Date (01/01/11) you want the query to begin pulling data.

Y_NEW_HIRES_SINCE_MMDDYY - NEW_HIRES_Since_MMDDYY

Hire Date: [   ] [31] ← **Choose a Date** button

[View Results]

ID	Start Date	Sex	Ethnic Grp	Name	Birthdate	Dept ID	Job Code	Descr	Comp Freq	Comp Rate	Annual Rt

To use a pop-up calendar instead of typing in the date, click on the Calendar button to the right of the date field, you will see the calendar shown to the right. Click on January 1, 2011 and 01/01/11 will display in the field.

January ▾	2011 ▾

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

◀ Current Date ▶
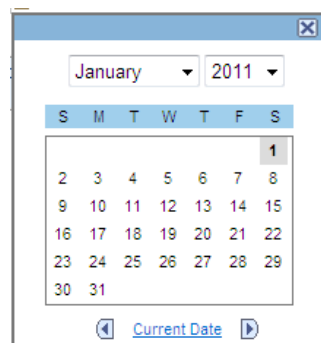
Many times a 🔍 icon appears next to the a parameter entry box.. If you Click on it and a Look Up window appears specific to the information needed. In this example, case Look Up Buisness Unit.

Look Up

Look Up Business Unit

Search by: Business Unit ▾ begins with [   ]

[Look Up] [Cancel] Advanced Lookup

Search Results

View 100   First ⬅ 1 of 1 ➡ Last

Business Unit Description
COMBU   City of Milwaukee BU

After completing the required field(s) for the query, Click the **View Results** button. Query will fetch the appropriate rows and display them.

To print the query results, right-click, and select Print from the menu. From the Print screen select the appropriate printer and Click on the **Print** button

Click the [x] button at the top right of your screen to exit the query.

Accessing Query

Once again, to access the Query tool, you will navigate accordingly: Main Menu > Reporting Tools > Query > **Query Manager**.

From this page, you can carry out these tasks:

- Find an existing query to view, modify, or run it.
- Create a new query.
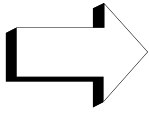
Navigate to the Query Manager search page

Searching for an Existing Query

Search for a query using the default (Basic) **Search** button or the Advanced Search hyperlink. Both search types allow you to use the following "search by" criteria: access group name, description, folder name, owner, query name, type, uses field name, and uses record name.

- The (Basic) **Search** allows you to search using the *begins with* condition.

- The Advanced Search allows you to perform a progressively narrower search by using one or more search by criteria and selecting from a broad choice of conditions.

If you know the name of the query you want to run (full or partial), select Query Name from the Search By drop-down list box. Then enter the query name (full or partial) in the field to the right of *begins with*.

- If you do not know the name of the query and want to search through a list of queries, leave the field to the right of *begins with* blank, and click the **Search** button to display the first 300 queries. *Note:* To search using any other "search by" criteria, select the

appropriate item from the Search By drop-down list box, and then enter the search string in the field.

- To perform an advanced search, click the <u>Advanced Search</u> hyperlink on the Query Manager search page. On the Advanced Search page, select the appropriate search by criteria and conditions, then enter a search string in each of the corresponding fields. Click the **Search** button to display a list of queries matching your search criteria.

-

The Search Results page appears. The results list all the queries that match the search criteria. The following information appears: query name, query description, owner (public or private), and folder.

You will scroll to the name of the query that you want to open or run.

By default, only the first 30 queries appear on the page. To see more of the list, click the navigation buttons and links located on the Header Bar. If there are more than 100 queries listed, select View

100 to view the first 100. Use the scrollbar to view the rest of the list. The View All option may also be available.

You will use a public query to become familiar with the Query pages. You can run it, but you will be unable to change the query definition.
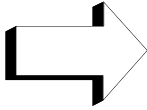
Search for the query called Y_EMPLOYEE_CNT_DEPT and click the **Edit** button. The query definition will be shown on your screen, as shown below.

From this page, you can study the query definition and also preview the results.

Viewing a Query

On this page is where you can select and view the fields, criteria, and other details associated with the current query. The tabs across the top of the page include **Records**, **Query**, **Expressions**, **Prompts**, **Fields**, **Criteria**, **Having**, **View SQL**, and **Run**. You will learn more about these as we proceed.

Understanding Records and Fields
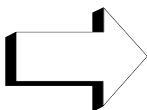
Click on the **Query** tab. This public query is comprised of two records (tables). In this course, you will be generating queries based upon a single record.
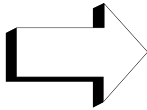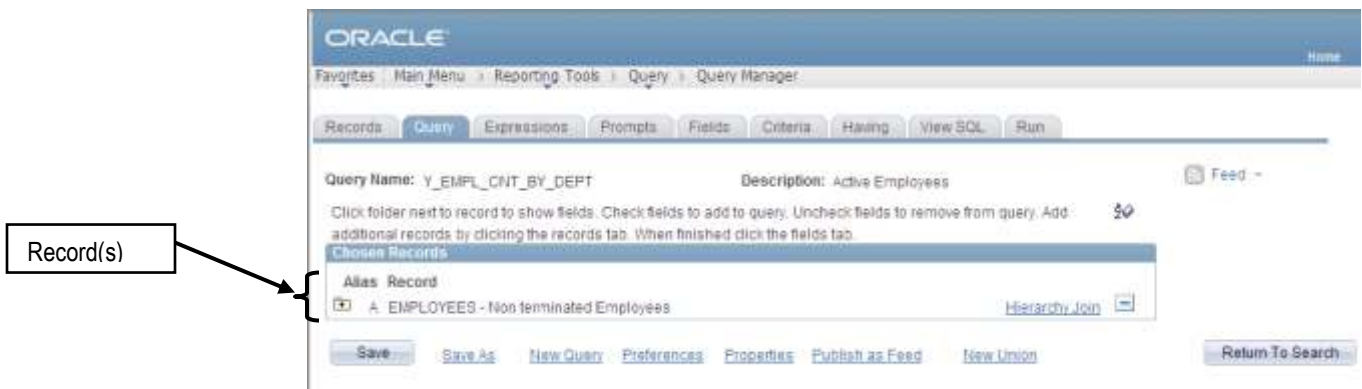
Record(s)

Click on the ⊞ (**Expand All Records**) button. Then press **Ctrl-Home** to go to the top of the page. The little key icons denote key fields. Key fields make database searching faster and more efficient.

Key Fields

Previewing ("Running") a Query

Next you will learn how to preview a query.
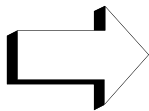
Click the **Run** tab. This query has no run-time prompts, so the data will appear after you click the **Run** tab. On many queries you will be prompted to enter data in one or more prompt fields. If so, enter the data as shown on the screen print below, and then click **OK**. The query results are displayed in the window.

Notice that under the folder tabs the number of rows that meets the criteria is displayed. Also notice that there are scroll bars along the bottom and the side of the screen to allow you to page up and down and side to side.

Now that you are somewhat acquainted with running a query, you will build a new query from start to finish.

Building a Query "At a Glance"

To give you a frame of reference, the steps for building a query are outlined below. Each step is explained in detail throughout the rest of this course guide.

To create a query:

1. **SELECT RECORD DEFINITIONS**
   Your first step in creating a query is to select the database table (record) that contains the data you want. In the HRMS database, tables are represented as record definitions.

2. **SELECT FIELDS**
   Upon selecting the record definition(s) that contain the data you want, you will specify which fields you want to display in your query.

3. **FORMAT THE QUERY OUTPUT**
   Query offers a number of different options for formatting the query output. You can change the column headings and column order, specify a sort order for the result rows, and display Translate Table values in place of codes.

4. **SPECIFY SELECTION CRITERIA**
   In most cases, you do not want all the rows of data from the table, just the rows that meet certain conditions. To limit the returned rows, you define selection criteria.

   To add a criterion, you will **1)** select the field you will use in your selection criterion, **2)** choose a comparison Condition Type, and **3)** enter a value (or values) in the dialog box.

5. **CHOOSE AN OUTPUT OPTION AND PREVIEW THE QUERY**
   Choose the Preview option while you are refining your query to ensure that you get the desired results. Query will retrieve the requested data from the database and
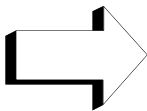
Building a Query, Step By Step

Now that you have seen an overview of the steps for creating a query, you will build your own query, one step at a time.
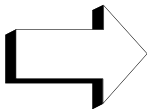
Note: One quick way to create a new query is to open a public query that is *close* to what you want to create, and save it as a private query. Once that is done, you can modify it freely. To do so, open the public query, and select the Save As hyperlink. Then complete the dialog box as shown, being sure to change the owner to Private as well as the query name and description. Click **OK**. You're now able to modify the query definition as you wish.

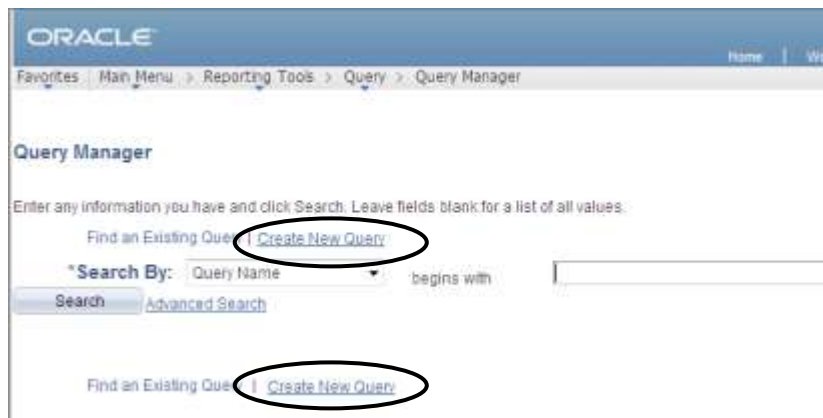To build a new query, follow the steps that follow.

Viewing Records

To create a new query, navigate accordingly:
Main Menu > Reporting Tools > Query > **Query Manager**

Click one of the Create a New Query hyperlinks.
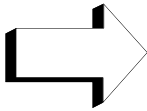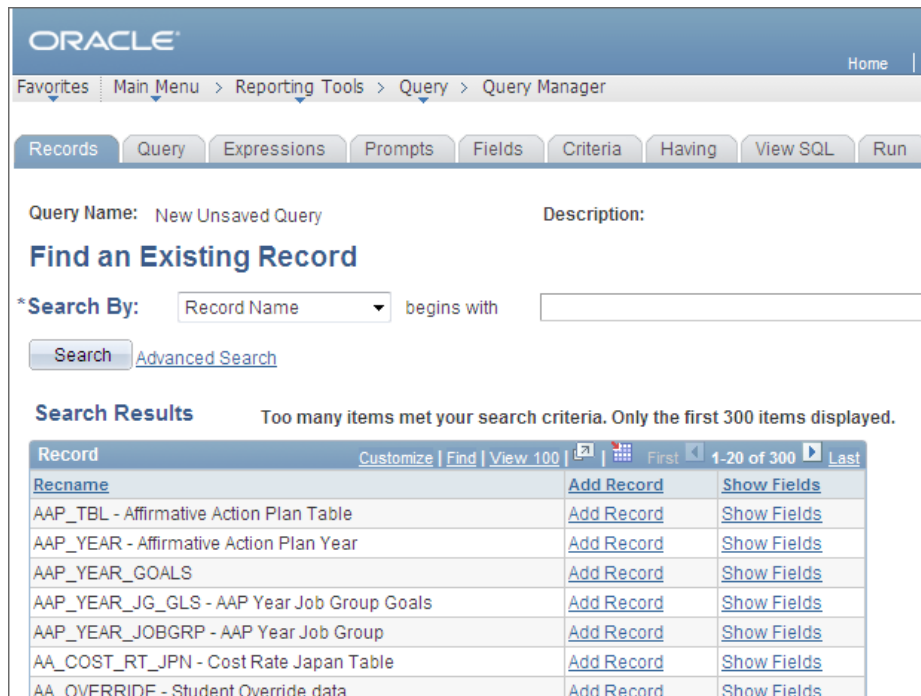
To view the first 300 records, click the **Search** button. (Then, if you wish, you may click the <u>View 100</u> hyperlink to view 100 records at a time.)

To search for a specific record, enter a partial value, as shown below. Enter JOB, and then click the **Search** button (or press **Enter**). All records beginning with JOB are returned.

ORACLE

Home

Favorites | Main Menu > Reporting Tools > Query > Query Manager

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Query Name: New Unsaved Query   **Description:**

Find an Existing Record

*Search By: Record Name ▾   begins with   JOB

[Search] Advanced Search

Search Results

Record			
	Customize | Find | View All | ⬚ | ▦ First ◄ 1-20 of 46 ► Last		
Recname		**Add Record**	**Show Fields**
JOB - EE Job History		Add Record	Show Fields
JOBCDTRN_CAREER - Job Codes - Career Planning		Add Record	Show Fields
JOBCD_COMP_RATE - Job Code Comp Rate Table		Add Record	Show Fields
JOBCD_GRADE_LNG - Job Evaluations by Grade Lvl		Add Record	Show Fields
JOBCD_SURVEY - Job Code Salary Survey		Add Record	Show Fields
JOBCD_TASK_DEFN - Job Code Task Definition		Add Record	Show Fields
JOBCD_TASK_TBL - Job Code Task Tbl Control		Add Record	Show Fields
JOBCD_TRN_PROG - Job Codes		Add Record	Show Fields
JOBCODE_GRADE - Job Evaluations by Grade Lvl		Add Record	Show Fields
JOBCODE_HAZ_TBL - Hazard Codes identified by Job		Add Record	Show Fields

Selecting a Record

You select a record here that contains the data that is needed for your report.
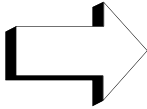
In this example, choose JOB and click the Show Fields hyperlink to see the fields for that record.

Then click the **Return** button to go back.

The record you select establishes the primary focus of your query.

To select a record, you will click the Add Record hyperlink.
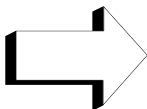
Select and add the JOB record.

The **Query** tab will be selected. (*Note: Selecting an effective dated file will cause an effective date prompt to be added to the query – see message window.*)
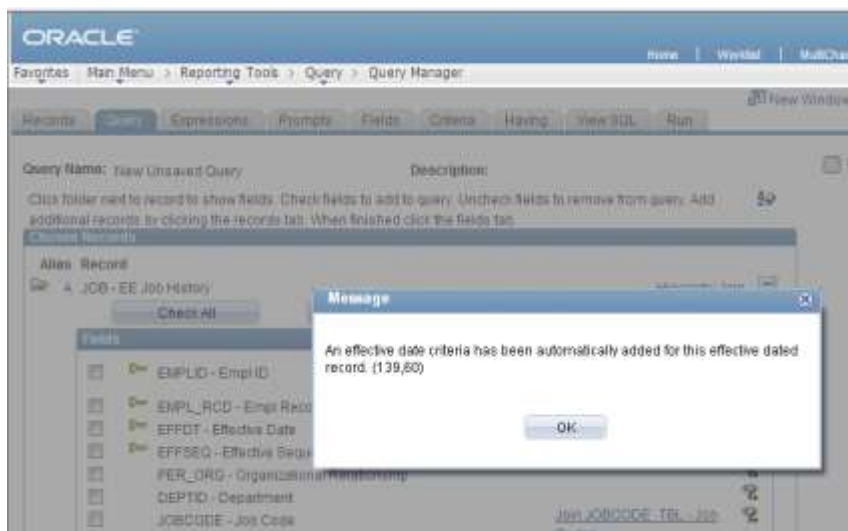
Selecting Fields

Next, you will select the fields that will be used in your report.
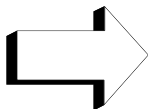
If you wish, click on the ᴬ◊ (Sort fields alphabetically) **icon** to see your fields listed in alphabetical order.
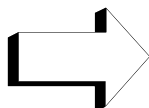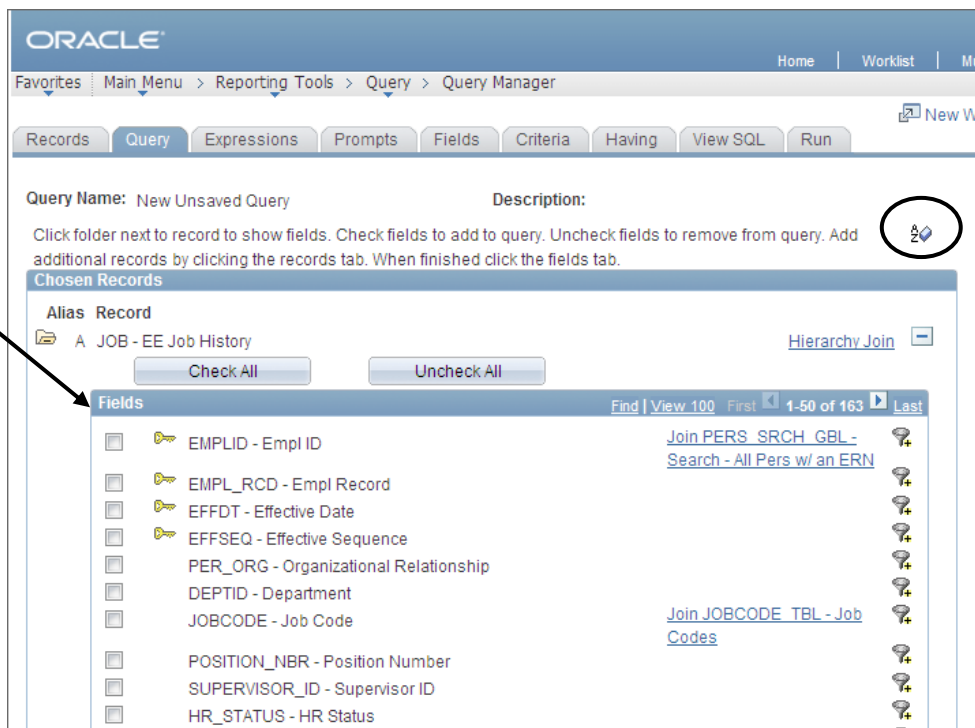
Choose the check boxes for the fields shown in this example.

Next, click on the **Fields** tab. Your screen should look like that follows. Notice the Format column. While you cannot change the format of a field, you can learn about the field by looking in this column. For instance, EMPLID is a character field with eleven places. ACTION_DT is a date field (YYYY-MM-DD). EMPL_RCD is a numeric field with three spaces.

You may also see other field types listed here.

Say you wanted to select only those rows pertaining to the DEPTID 5457.

Click the **Add Criteria** button ⛟ to the right of the DEPTID field (on the **Fields** tab).

Building a Query, Step By Step, continued

Enter **5457** in the Constant field (inside the Expression 2 box). Essentially, you have created a statement that reads "DEPTID is equal to 5457". Click **OK**.
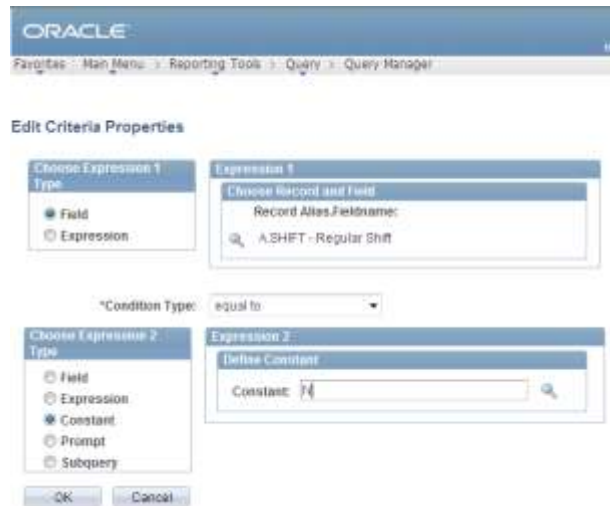
Next, you will add additional selection criteria to further refine your query.
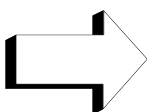
Now say that you only want to look at jobs where the Shift is not applicable (Shift N). Since you want to select only Shift N, click on the **Add Criteria** button 🔽 to the right of the SHIFT field (on the **Fields** tab). You should see a dialog box just like that shown above for DEPTID. Enter N in the Constant box, and click **OK**.
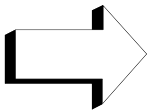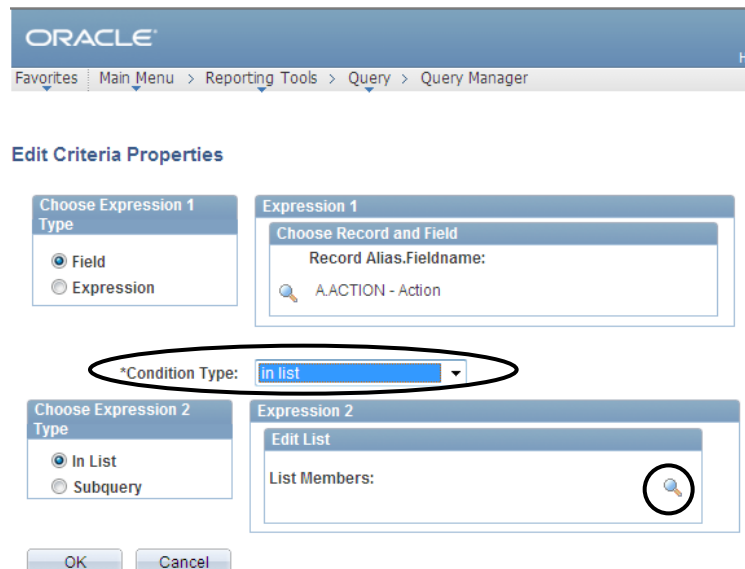
Let's say that you're interested in seeing just the Hire and Rehire actions. To select those rows, click on the **Add Criteria** icon 🔽 to the right of the ACTION field (on the Fields tab).

Instead of using a single constant value, choose the In list condition type from the Condition Type field.
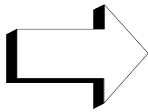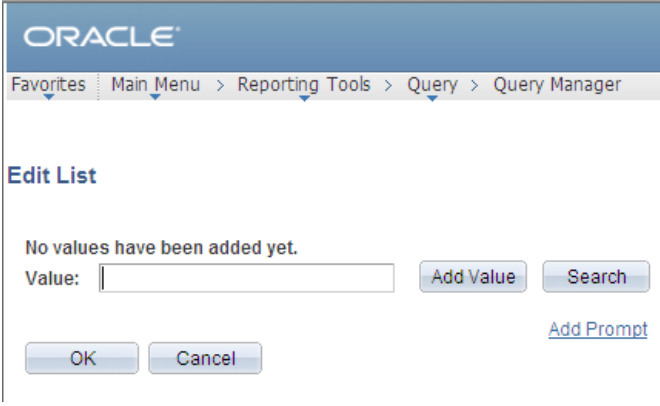
Next, click on the 🔍 icon in the right side of the Edit List box List Members.
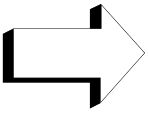
When the codes for hire and rehire are known, enter them one at a time and click the **Add Value** button for each code to be selected. The values are placed in the upper list box. From this box they can be customized or deleted from the query selection.

If the codes are not known, click the 🔍 icon in the Edit List box (see above). The Edit List screen will appear. Click the **Search** button.

ORACLE

Favorites | Main Menu > Reporting Tools > Query > Query Manager

Edit List

No values have been added yet.

Value: [ ]   Add Value   Search

                                    Add Prompt
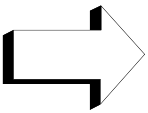
    OK   Cancel

When the Action screen appears, click the magnifying glass to display the list of values.

ORACLE
Favorites   Main Menu > R

Select A Constant
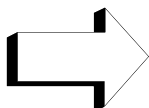
Action: [   ] 🔍
    OK   Cancel

Click the value to add it to the selection list.
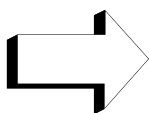
When a new value has been added, it will appear in the Edit List. Click **OK** when selections are complete.

Then click **OK** again.

Click on the **Criteria** tab. Take a look at the example that follows showing the *Completed Selection Criteria* and compare it to your own screen.

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Query Name: New Unsaved Query   **Description:**   Feed ▾

[Add Criteria]   [Group Criteria]   [Reorder Criteria]

Criteria   Customize | Find | ▯ | ⊞   First ▮ 1-4 of 4 ▮ Last

Logical		Expression1	Condition Type	Expression 2	Edit	Delete
	▾	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	▬
AND	▾	A.SHIFT - Regular Shift	equal to	N	Edit	▬
AND	▾	A.ACTION - Action	in list	('HIR','REH')	Edit	▬
AND	▾	A.DEPTID - Department	equal to	5457	Edit	▬

[Save]   Save As   New Query   Preferences   Properties   Publish as Feed   New Union   Return To Search

You will learn much more about selection criteria in Chapter 3, Specifying Query Output.
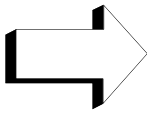
Click on the **Run** tab.

You will notice, when you compare your results to the print screen that follows, that the results are shown in database order.

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

View All | Rerun Query | Download to Excel | Download to XML   First ◀ 1-19 of 19 ▶ Last

	ID	Empl Record	Eff Date	Sequence	Org Relation	Dept ID	Job Code	Action	Action Date	Reason	Location	Shift	Reg/Temp	Full/Part
1	010097	0	03/28/2011	0	EMP	5457	142561	REH	03/28/2011	A32	545 40	N	R	F
2	019204	0	05/02/2011	0	EMP	5457	2583	REH	05/03/2011	A1	545 33	N	R	F
3	019931	0	04/29/2011	0	EMP	5457	142561	REH	04/29/2011	A24	545 39	N	T	L
4	019932	0	04/29/2011	0	EMP	5457	142561	REH	04/29/2011	A24	545 39	N	T	L
5	019945	0	04/29/2011	0	EMP	5457	142561	REH	04/29/2011	A24	545 39	N	R	S
6	021292	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
7	021293	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
8	021294	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
9	021295	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
10	021296	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
11	021297	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
12	021303	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
13	021305	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
14	021311	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
15	021313	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
16	021314	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
17	021317	0	04/29/2011	0	EMP	5457	142561	HIR	04/29/2011	A24	545 39	N	T	L
18	021323	0	05/02/2011	0	EMP	5457	2583	HIR	05/03/2011	A1	545 35	N	R	F
19	021336	0	05/02/2011	0	EMP	5457	142561	HIR	05/12/2011	A24	545 39	N	T	L

Now that you have written a query, you can begin to tweak it so that it meets your needs. You will learn shortly how to change not only how data is sorted, but also how columns are ordered and labeled.

But first, it's a good idea to save what you have built so far. Learn about saving queries next.

Saving Your Query

Once you have generated a query, often you will want to save it so you can execute it again at a later time without having to re-create it.
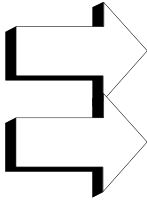
Return to the **Fields** tab.

Click the **Save** button to view the **Save** screen.
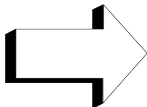
Save this query as **123**. Click **OK**.

This query will automatically be saved as a private query, since most City of Milwaukee Query users will not be able to save queries as public. The reason for this is that any user who can create a public query can modify any other public query. Only you, the person who created the query, will be able to open and execute this query.

Next you will learn how to edit field properties.

Editing Field Properties: Heading Text
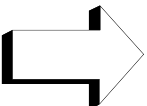
If you wish to modify a heading or an aggregate function for a field, click the **Edit** button to the right of the field.

View field properties, or use field as criteria in query statement.

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - Empl ID	Char11				ID		Edit	−
2	A.EMPL_RCD - Empl Record	Num3.0				Empl Record		Edit	−
3	A.EFFDT - Effective Date	Date				Eff Date		Edit	−
4	A.EFFSEQ - Effective Sequence	Num3.0				Sequence		Edit	−
5	A.PER_ORG - Organizational Relationship	Char3		N		Org Relation		Edit	−
6	A.DEPTID - Department	Char10				Dept ID		Edit	−
7	A.JOBCODE - Job Code	Char6				Job Code		Edit	−
8	A.POSITION_NBR - Position Number	Char8				Position		Edit	−
9	A.SUPERVISOR_ID - Supervisor ID	Char11				Supv ID		Edit	−
10	A.HR_STATUS - HR Status	Char1		N		HR Status		Edit	−
11	A.APPT_TYPE - Appointment Type	Char1		N		Appt Type		Edit	−
12	A.MAIN_APPT_NUM_JPN - Main Appointment Number	Num3.0				Main Appt Num		Edit	−
13	A.POSITION_OVERRIDE - Override Position Data	Char1				Posn Ovrd		Edit	−
..	A.POSN_CHANGE_RECORD - Position							Edit	
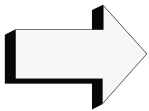
Click **Edit** the **PER_ORG** field.

If you wish to enter a heading of your own, such as Org Rel., click the radio button next to Text, and enter the new heading in the Heading Text field. *Note:* RFT means "Record Field Title." The default heading is RFT Short.

Edit Field Properties

Field Name: A.PER_ORG - Organizational Relationship

Heading
- ○ No Heading   ● RFT Short
- ○ Text   ○ RFT Long

Heading Text:
Org Relation

*Unique Field Name:
A.PER_ORG

Aggregate
- ● None
- ○ Sum
- ○ Count
- ○ Min
- ○ Max
- ○ Average

Translate Value
- ● None   ○ Short   ○ Long

Effective Date for Short/Long
- ● Current Date
- ○ Field
- ○ Expression

Add Prompt   Add Field

OK   Cancel

Click **OK** to save the new column heading setting.
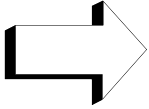
Preview the modified query, if you wish, by clicking the **Run** tab. Notice the changes that you made to the PER_ORG field. Then click the **Fields** tab once again.

Changing Sort Order

Your output can be sorted by Query. Select the **Fields** tab. The column order will display in the Col column. The sort order will display in the Ord column.

- COLUMN ORDER is the order in which you want the fields to appear in your query from left to right.

- SORT ORDER means the order that the rows of data will be sorted from top to bottom based upon the values in a particular field or fields.

The numbers in the Ord column indicate on which fields your query is sorted and in what order. The number 1 represents the highest order of sort. *Note:* No sorts are present in the query thus far.

The numbers in the Col column indicate the sequence of the fields going across the screen or page from left to right.
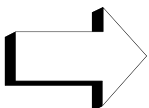
To reorder the fields for display or change the sort sequence in the query output, click the **Reorder/Sort** button.

To control the order of your output, first determine on which fields you want to sort. Then, click the **Reorder/Sort** button to specify the order in which you want the fields to be sorted.

Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number.

Change the *order by* number by entering numbers on the right. To remove an *order by* number, leave the field blank or enter a 0. Click the checkbox in the Descending column to sort the field in descending order.
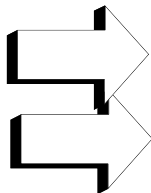
Click **OK** when finished.

Reorder the fields. Then click **OK**.

Edit Field Ordering

Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number. Change the order by number by entering numbers on the right. To remove an order by number, leave the field blank or enter a 0.

Edit Field Ordering			Customize | Find | View All |		First	1-14 of 14	Last
New Column	Column	Record.Fieldname		Order By	Descending	New Order By	
1	1	A.DEPTID - Department		1	☐	1	
10	2	A.ACTION_DT - Action Date			☐		
2	3	A.ACTION_REASON - Reason Code		2	☐	2	
4	4	A.EMPLID - Empl ID			☐		
5	5	A.EMPL_RCD - Empl Record			☐		
6	6	A.EFFDT - Effective Date			☐		
7	7	A.EFFSEQ - Effective Sequence			☐		
8	8	A.PER_ORG - Organizational Relationship			☐		
9	9	A.JOBCODE - Job Code			☐		
	10	A.ACTION - Action			☐		
3	11	A.LOCATION - Location Code		3	☐	3	
11	12	A.SHIFT - Regular Shift			☐		
12	13	A.REG_TEMP - Regular/Temporary			☐		
13	14	A.FULL_PART_TIME - Full/Part Time			☐		

OK   Cancel

The results are displayed on the Fields screen:
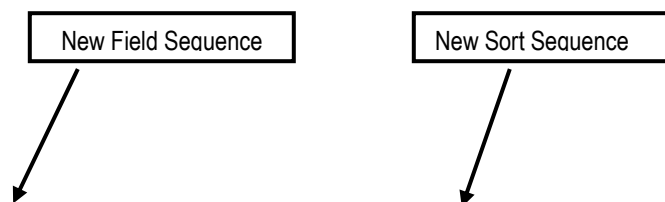
New Field Sequence

New Sort Sequence

Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run

Query Name: 123   Description: hire, rehire   Feed ▾

View field properties, or use field as criteria in query statement.   Reorder / Sort

Fields   Customize | Find | View All | 🔲 | 🎞 First 1-14 of 14 Last

Col	Record.Fieldname	Format	Ord	XLAT	App	Heading Text	Add Criteria	Edit	Delete
1	A.DEPTID - Department	Char10	1			Dept ID	🔍	Edit	−
2	A.ACTION_REASON - Reason Code	Char3	2			Reason	🔍	Edit	−
3	A.LOCATION - Location Code	Char10	3			Location	🔍	Edit	−
4	A.EMPLID - Empl ID	Char11				ID	🔍	Edit	−
5	A.EMPL_RCD - Empl Record	Num3.0				Empl Record	🔍	Edit	−
6	A.EFFDT - Effective Date	Date				Eff Date	🔍	Edit	−
7	A.EFFSEQ - Effective Sequence	Num3.0				Sequence	🔍	Edit	−
8	A.PER_ORG - Organizational Relationship	Char3		N		Org Relation	🔍	Edit	−
9	A.JOBCODE - Job Code	Char6				Job Code	🔍	Edit	−
10	A.ACTION_DT - Action Date	Date				Action Date	🔍	Edit	−
11	A.SHIFT - Regular Shift	Char1		N		Shift	🔍	Edit	−
12	A.REG_TEMP - Regular/Temporary	Char1		N		Reg/Temp	🔍	Edit	−
13	A.FULL_PART_TIME - Full/Part Time	Char1		N		Full/Part	🔍	Edit	−
14	A.ACTION - Action	Char3				Action	🔍	Edit	−

Save   Save As   New Query   Preferences   Properties   Publish as Feed   New Union   Return To Search
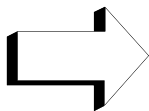
⇨ View the query by clicking the **Run** tab.

Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run
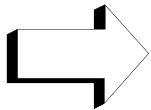
View All | Rerun Query | Download to Excel | Download to XML   First ◀ 1-19 of 19 ▶ Last

	Dept ID	Reason	Location	ID	Empl Record	Eff Date	Sequence	Org Relation	Job Code	Action Date	Shift	Reg/Temp	Full/Part	Action
1	5457	A1	545 33	019204	0	05/02/2011	0	EMP	2583	05/03/2011	N	R	F	REH
2	5457	A1	545 35	021323	0	05/02/2011	0	EMP	2583	05/03/2011	N	R	F	HIR
3	5457	A24	545 39	019931	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	REH
4	5457	A24	545 39	019932	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	REH
5	5457	A24	545 39	019945	0	04/29/2011	0	EMP	142561	04/29/2011	N	R	S	REH
6	5457	A24	545 39	021292	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
7	5457	A24	545 39	021293	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
8	5457	A24	545 39	021294	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
9	5457	A24	545 39	021295	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
10	5457	A24	545 39	021296	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
11	5457	A24	545 39	021297	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
12	5457	A24	545 39	021303	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
13	5457	A24	545 39	021305	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
14	5457	A24	545 39	021311	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
15	5457	A24	545 39	021313	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
16	5457	A24	545 39	021314	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
17	5457	A24	545 39	021317	0	04/29/2011	0	EMP	142561	04/29/2011	N	T	L	HIR
18	5457	A24	545 39	021338	0	05/02/2011	0	EMP	142561	05/12/2011	N	T	L	HIR
19	5457	A32	545 40	010097	0	03/28/2011	0	EMP	142561	03/28/2011	N	R	F	REH

Viewing SQL

You can view and print your query definition, which documents the fields used in your query as well as other important information such as the selection criteria. SQL stands for "Structured Query Language."
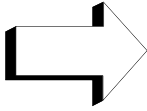
Click the **View SQL** tab.
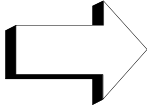
To print the SQL, right-click on the page, and select **Print**.

New W

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: 123   Description: hire, rehire

Query SQL:
SELECT A.DEPTID, A.ACTION_REASON, A.LOCATION, A.EMPLID, A.EMPL_RCD, TO_CHAR(A.EFFDT,'Y
A.EFFSEQ, A.PER_ORG, A.JOBCODE, TO_CHAR(A.ACTION_DT,'YYYY-MM-DD'), A.SHIFT, A.REG_TEMF
A.ACTION
  FROM PS_JOB A, PS_EMPLMT_SRCH_QRY A1
  WHERE A.EMPLID = A1.EMPLID
    AND A.EMPL_RCD = A1.EMPL_RCD
    AND A1.OPRID = 'COMADM'
    AND A.EFFDT =
      (SELECT MAX(A_ED.EFFDT) FROM PS_JOB A_ED
      WHERE A.EMPLID = A_ED.EMPLID
        AND A.EMPL_RCD = A_ED.EMPL_RCD
        AND A_ED.EFFDT <= SYSDATE)
    AND A.EFFSEQ =
      (SELECT MAX(A_ES.EFFSEQ) FROM PS_JOB A_ES
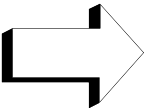
To print the query results, right-click, and select Print from the menu. From the Print screen select the appropriate printer and Click on the **Print** button.

Chapter Key Points

- From the Query Manager page you may perform the following actions by accessing the Actions drop-down list box:

  o Add a query to your <u>Favorites</u>
  o Copy a query to another user
  o Delete a query
  o Move a query to a folder
  o Rename a query

- Also from the Query Manager page, you can open an existing query, run output to HTML or Excel, or schedule a query to run at another time.

- The primary record for a query is selected from the Find an Existing Record page, which can be found by navigating accordingly: Main Menu > Reporting Tools > Query > **Query Manager**

- Then click on the <u>Create a New Query</u> hyperlink.

- Three output options when executing a query include previewing the results, sending the output to an Excel spreadsheet, and displaying results in HTML format.

- When editing field properties, the text listed in the Headings column will be used for the column heading in the output to the Preview page.

- To change column order for a field, click the **Reorder/Sort** button, and enter new column numbers to re-order the columns.

- Likewise, you can sort and re-sort your Query output, depending on your wishes, using the **Reorder/Sort** button.

- You can view and print your query definition, which documents the fields used in your query as well as other important information such as the selection criteria, by clicking the **View SQL** tab.

C H A P T E R   3

SPECIFYING QUERY OUTPUT

Objectives

By the end of this chapter, you will be able to:

- Understand Translate Table Values

- Specify criteria for retrieving data by entering selection criteria and selecting conditions

- Use special logical operators in your selection criteria: **AND**, **AND NOT**, **OR**, and **OR NOT**

- Generate Query run-time prompts, both single and multiple

- Use pre-defined aggregate functions in a query

- Delete queries

Overview

Next, you will explore the options for displaying the Translate Table fields: long descriptions, short descriptions, and the code values.

You will also build upon your understanding of a key function: adding criteria clauses to a query to return specific rows of data. Within these criteria clauses you will compare fields to find data of equal values, values greater or less than the field, values in a list, values in a range, and more. You will also use the special logical operators **AND**, **AND NOT**, **OR**, and **OR NOT**.

You will learn another powerful function: setting up run-time prompts, which allow you to enter values for a specific field at the time the query is executed and to see how these values are then used as criteria for retrieving information.

You will be shown how to use aggregate functions in a query. Instead of returning many rows of data, perhaps you are only interested in a count of rows or a sum of a numeric field. You can produce these results using Query. Finally, you will discover how to delete queries.

Displaying Translate Values

You may come across records, such as EMPLOYEES, that contain translate values, which you can use in your queries. A table called the Translate Table stores the values for fields that contain a short list of codes that do not change.
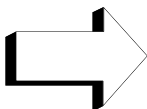
To illustrate, take a look at the charts below.

Field = **ETHNIC GROUP**		
Translate Code:	**Short Translate Value:**	**Long Translate Value:**
1	White	White
2	Black	Black/African American
3	Hispanic	Hispanic/Latino
4	Asian	Asian
5	Am. Indian	American Indian/Alaska Native
6	Not Specified	Not Specified
7	Hawaiian	Native Hawaiian/Oth Pac Island

Note: As you can see, sometimes the value of the short and long translate value is the same.

You can direct Query to display the translate code, the short translate value, or the long translate value.

First of all, open the public query:

DER_INFO_AGE_ACTIVE_DETAIL

Click the <u>Save As</u> hyperlink. Complete the dialog box as shown, making sure to change the owner to Private and naming the query **DER_INFO_AGE_ACTIVE_DETAIL**. Click **OK**.
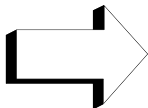
Make sure that the **Fields** tab is activated.

The three options for displaying translate values are:

None	Translate code. Assumes Current Date logic.
Short	10 char Xlatshortname. You specify effective date logic.

Long   30 char Xlatlongname. You specify effective date logic.

You will always know that a field is associated with a translate value if one of these characters appears in the XLAT column: N (None), S (Short), or L (Long).

The EMPLOYEES table is shown on this page. Notice the value N under the XLAT column for the field BEN_PLAN and the N for the field EMPL_STATUS.

Click the **Edit** button to the right of the EMPL_STATUS field. The Edit Field Properties dialog box will appear. Now you see additional options in the Translate Value section of the box.

To modify a translate value, simply click on the radio button next to None, Short, or Long.

Click on the None radio button now.

> *Note:* When choosing Short or Long, always remember to select Current Date for the Effective Date for Short/Long option.
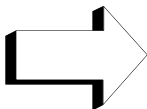
Click **OK**. View the query results by clicking the **Run** tab. In this example, three parameter boxes appear: Begin Birthdate, End Birthdate and Benefit Plan. Enter or choose January 1, 1975 for the Begin Birthdate, December 31, 2000 for End Birthdate and leave the benefit plan blank. Here is a display of the results:

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Begin Birthdate = 1975-01-01,End Birthdate=2000-12-31,Benefit Plan=

View All | Rerun Query | Download to Excel | Download to XML   First ◀ 1-100 of 266 ▶ Last

|	ID	Name	Birthdate	Plan Typ	Plan	Pay Status
1	009094	KLUGHT,ANNE M	06/08/1975	16		A
2	009094	KLUGHT,ANNE M	06/08/1975	15		A
3	010088	RODRIGUEZ,JUAN J	02/26/1975	16		A
4	010088	RODRIGUEZ,JUAN J	02/26/1975	15		A
5	010145	STRANKOWSKI,CHRISTOPHER D	04/11/1975	16		A
6	010145	STRANKOWSKI,CHRISTOPHER D	04/11/1975	15		A
7	010205	TUCKER,BRYAN P	10/13/1977	11		A
8	010205	TUCKER,BRYAN P	10/13/1977	10		A
9	011017	RAMIREZ,SAMUEL L	05/16/1977	16		A
10	011017	RAMIREZ,SAMUEL L	05/16/1977	15		A
11	011017	RAMIREZ,SAMUEL L	05/16/1977	10		A
12	011094	ROUNDTREE,EDWARD L	08/14/1977	16		S
13	011094	ROUNDTREE,EDWARD L	08/14/1977	15		S
14	011599	KLEMSTEIN,KURT K	01/29/1975	16		A
15	011599	KLEMSTEIN,KURT K	01/29/1975	15		A
16	011662	THOMAS,THIMOTHY F	10/25/1977	16		A
17	011662	THOMAS,THIMOTHY F	10/25/1977	15		A
18	011662	THOMAS,THIMOTHY F	10/25/1977	11		A
19	011662	THOMAS,THIMOTHY F	10/25/1977	10		A
20	011663	HUTCHENS,JENNIFER M	05/11/1978	16		A
21	011663	HUTCHENS,JENNIFER M	05/11/1978	15		A
22	011749	DEAU,TAMMY J	07/23/1981	16		A

Notice that the Pay Status column contains the letter A (the "None" value) for each vendor, not the word Active, as would be shown if the short translate value had been used. When you run across translate values in a table, you now have an idea of how they can be used.

Entering Selection Criteria

Very often, you do not want to retrieve every row of data from the record you are accessing. By defining criteria expressions, you can selectively retrieve the desired information. To specify criteria expressions, select the **Criteria** tab.
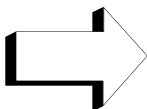
Provided **DER_INFO_AGE_ACTIVE_DETAIL V2** is still open, click the **Criteria** tab. You should see the page shown here.

Note: When a query contains fields from several records, the field name will be preceded by a letter that corresponds to its file. The "A" in this query refers to the record EMPLOYEES (see the **Query** tab). The ability to create queries using multiple records (in other words, the ability to "join records") is limited to a small number of advanced users. However, all Query users have the ability to perform a "related record" join, discussed in the Query for HRMS Version 9.1 Beyond the Basics class.

Based on the type of field for which you are adding criteria, you will have different options available.

The options available are:

Logical	Represents *how* criteria rows will be compared with each other. The first logical operator is blank, while each subsequent criterion defaults to **AND**. The other choices are **AND NOT**, **OR**, and **OR NOT**.

Expression 1	Used to specify *what* you are comparing (Field or Expression). In this class, you will use Field only.
Condition Type	States how Expression 1 is to be compared with Expression 2.
Expression 2	The comparison value, which can be a constant, a field from another record, an expression, a subquery, or a value (or values) entered in a run-time prompt.

Summary of Combinations

The Condition Type determines how Query Manager compares the values of Expression 1 to Expression 2.

Note: For each of the Condition Types listed below, Query Manager offers a "not" option that reverses its effect. For example, *not equal to* returns all rows that *equal to* would not return.

Condition Type:	When it returns a row…
between	The value in the selected record field falls between two comparison values. The range is inclusive.
equal to	The value in the selected record field exactly matches the comparison value (*one*).
exists	This Condition Type is different from the others, in that it does not compare a record field to the comparison value. The comparison value is a subquery. If the subquery returns any data, PeopleSoft Query returns the corresponding row.
greater than	The value in the record field is greater than the comparison value.
in list	The values in the selected record field match the comparison values in a list (*more than one*).
is null	The selected record field does not have a value in it. You do not specify a comparison value for this Condition Type. *Note:* Key fields, required fields, character fields, and numeric fields do not allow null values.
in tree	The value in the selected record field appears as a node in a tree created with PeopleSoft Tree Manager. The comparison value for this Condition Type is a tree or branch of a tree that you want PeopleSoft Query to search.
less than	The value in the record field is less than the comparison value.
like	The value in the selected field matches a specified string pattern. The comparison value may be a string that contains wildcard characters. The wildcard characters that PeopleSoft Query recognizes are **%** and **_**.

Explored in this guide.

You will learn to use several of these as you progress through this guide.

Equal To

The *equal to* Condition Type finds fields having a value that *exactly matches* the value specified. The *equal to* Condition Type limits you to one value.
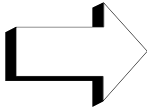
Back to the **DER_INFO_AGE_ACTIVE_DETAIL_V2** query. Make sure that the **Criteria** tab is selected.

Earlier you learned to add criteria by clicking the **Add Criteria** button from the **Fields** tab. Now you will learn to add criteria from the **Criteria** tab.

Click the **Add Criteria** button.

Click on the 🔍 in the and choose the Select Record and Field box in the Expression 1 box.

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
⦿ Field	**Choose Record and Field**
○ Expression	Record Alias.Fieldname:

*Condition Type: equal to ▼

Choose Expression 2 Type	Expression 2
○ Field	**Define Constant**
○ Expression	Constant:
⦿ Constant	
○ Prompt	
○ Subquery	

[OK] [Cancel]

In the Select a record to show fields for, box, click on the **Show Fields** button for the appropriate record. In this example, choose Health_Benefit.

Select the PLAN_TYPE – Plan Type option from the menu. In the Select a field box, Click on Plan_Type – Plan Type.

Select a field

Select a record to show fields for			Customize	Find	First 1-3 of 3 Last
Alias	Record	Record Description	Show Fields
A	PERSONAL_DATA	PERSONAL_DATA for Rpting	Show Fields
B	HEALTH_BENEFIT	EE Health Benefit Elections	Show Fields
C	JOB	EE Job History	Show Fields

Select a field   Customize | Find | View All | First 1-21 of 21 Last

B.EMPLID - Empl ID
B.EMPL_RCD - Empl Record
B.COBRA_EVENT_ID - COBRA Event Identification
B.PLAN_TYPE - Plan Type
B.BENEFIT_NBR - (Not Implemented!)
B.EFFDT - Effective Date
B.DEDUCTION_END_DT - Deduction End Date
B.COVERAGE_BEGIN_DT - Coverage Begin Date
B.COVERAGE_END_DT - Coverage End Date
B.COVERAGE_ELECT - Coverage Election
B.COVERAGE_ELECT_DT - Coverage Elect Date
B.BENEFIT_PLAN - Benefit Plan
B.COVRG_CD - Coverage Code
B.HIPAA_REPORT_DT - HIPAA Report Date (Emp)
B.PRETAX_CD - Allow Pre-Tax Medical Premium
B.MED_PREM_PRETAX - Pre-Tax Medical Premium Value
B.HLTH_PROVIDER_ID - Health Provider ID
B.PREVIOUSLY_SEEN - Previously Seen
B.HIPAA_DEP_RPT_DT - HIPAA Report Date (Dep)
B.OTH_INSURANCE_IND - Other Insurance Indicator
B.OTH_INSURANCE_NAME - Other Insurance Name

Cancel

The Edit Criteria Properties screen will appear again with B. PLAN_TYPE - Plan Type populated.

Edit Criteria Properties

Choose Expression 1 Type
○ Field
○ Expression

Expression 1
Choose Record and Field
Record Alias Fieldname:
B.PLAN_TYPE - Plan Type

*Condition Type: equal to

Choose Expression 2 Type
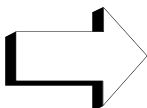○ Field
○ Expression
● Constant
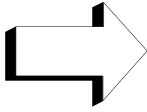○ Prompt
○ Subquery

Expression 2
Define Constant
Constant:

OK   Cancel

Then leave *equal to* as the Condition Type, and click on the 🔍 icon in the Expression 2 Define Content box to select a constant. In this case

choose 10 for Health and Click on <u>Select Constant.</u> You will see the dialog box shown on the next page.

Click **Select Constant** for choice **10** (Health).

Select A Constant

Values			Customize | Find | View All | 🔄 | 🎞️ | First ◀ 1-25 of 56 ▶ Last
Field Value	**Translate Long Name**	**Translate Short Name**	**Select Constant**
45	U.S. Savings Bonds	Sav Bonds	Select Constant
46	403(b)	403(b)	Select Constant
47	Nonelective Contributions	Nonelect	Select Constant
48	Employer Only	Emplr Only	Select Constant
49	Section 457	457	Select Constant
4A	Employee Stock Purchase	ESPP	Select Constant
50	Sick	Sick	Select Constant
51	Vacation	Vacation	Select Constant
52	Personal	Personal	Select Constant
10	Health	Health	Select Constant
1Z	Bus Pass	CVP	Select Constant
23	Employee Paid Life	EE Pd Life	Select Constant
27	Free Supplemental Insurance	Free Suppl	Select Constant
29	Enhanced over 1.5	Over 1.5	Select Constant
2Z	Enhanced Supplemental Life	E Sup Life	Select Constant

Cancel

The Edit Criteria Properties screen will appear again with 10, for Health, populated.

Edit Criteria Properties

Choose Expression 1 Type
- ◉ Field
- ○ Expression

Expression 1
Choose Record and Field
Record Alias.Fieldname:
🔍 B.PLAN_TYPE - Plan Type

*Condition Type: equal to

Choose Expression 2 Type
- ○ Field
- ○ Expression
- ◉ Constant
- ○ Prompt
- ○ Subquery

Expression 2
Define Constant
Constant: 10 🔍

OK   Cancel
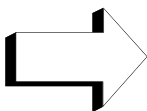
Your selection criterion is complete. Click **OK**. As noted, an **AND** operator is automatically added each time you add a new criteria expression.
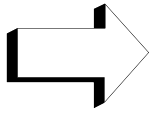
Click the **Criteria** tab the revisions in an additional row.

To see the output, click the **Run** tab. Enter the same parameters for the query and click **OK**.

Take a look at the results:

Plan Type 10 is the only one listed for all selected employees. Adding selection criteria limits the number of rows that are retrieved.

Notice that EmplIDs 014946 and 017306 each have more than one row with plan 10. This is due to being enrolled in multiple benefit periods in that plan.

Like

"**Like**" retrieves data containing fields that match specified portions of a character string. The *like* Condition Type is case sensitive and uses wildcard characters to search for data.

Following is output from a example query built to show this feature.

The Job Title column shows all job titles in the system meeting the other criteria set for collection such as Regular Employee for example.

Wildcard   A wildcard is a character that represents any character or any group of characters in a search string.

If you take a look at Edit Criteria Properties screen, this example shows the like Condition Type selected with PROG plus the wildcard % typed into the Expression 2 Define Constant box. We are looking for all Job Titles with Programer in the title in some form.

The query returned any rows where the JOBTITLE contained PROG, including Program Assistant I, Program Assistant II and Program Assisstant III.

Wildcard Character	Definition
% (percent)	Any string of zero or more characters. For example, **C%** finds any string beginning with the letter **C**.
_ (underscore)	Any single character. For example, **Hans_n** will find **Hansen** or **Hanson**.

You can even "mix" wildcards, such as entering **HANS_N%** to look for rows such as HANSEN,JULIA M and HANSON,LARS.

So, use the *like* Condition Type when you want to use wildcards to pull data from a record. Next, we'll take a look at the *between* Condition Type.

Between

"**Between**" selects fields having a value that is between two specified values. This is an *inclusive* range where the upper and lower values are included in the search.

between 010000 and 020000. You can use the *between* Condition Type to select only those employees meeting that criteria.
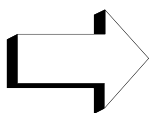
Click on the **Fields** tab to find the EMPLID field. Then click on the **Add Criteria** button.

Notice that this is a shortcut to using the **Add Criteria** button from the **Criteria** tab. Your selection statement is already half-completed.
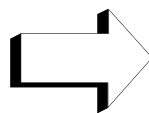
Next, select the *between* Condition Type. Then complete the Expression 2 field as shown below, typing in 010000 for the first constant and 020000 for the second. *Note:* There are no lookup values for this field eventhough a 🔍 still appears to the right of each Constant entry field..

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
◉ Field	**Choose Record and Field**
○ Expression	Record Alias.Fieldname:
	🔍 A.EMPLID - Empl ID

*Condition Type: between ▾

Choose Expression 2 Type	Expression 2
◉ Const - Const	**Define Constant**
○ Const - Field	Constant: 010000 🔍
○ Const - Expr	
○ Field - Const	**Define Constant 2**
○ Field - Field	Constant 2: 020000 🔍
○ Field - Expr	
○ Expr - Const	
○ Expr - Field	
○ Expr - Expr	

OK   Cancel
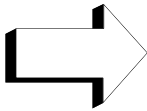
Click **OK**. Your *between* criterion is now complete. Click the Run tab to see the query results.

Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run

Begin Birthdate = 1975-01-01,End Birthdate=2000-12-31,Benefit Plan=

View All | Rerun Query | Download to Excel | Download to XML   First ◄ 1-39 of 39 ► Last

	ID	Name	Birthdate	Plan Typ	Plan	Pay Status
1	010205	TUCKER,BRYAN P	10/13/1977	10		A
2	011017	RAMIREZ,SAMUEL L	05/16/1977	10		A
3	011662	THOMAS,THIMOTHY F	10/25/1977	10		A
4	013755	WHITTEN,JESAIAH J	07/17/1976	10		S
5	014933	ZAREN,CHAD M	05/21/1977	10		A
6	014946	MONTEITH,BRENT N	12/03/1978	10		A
7	014946	MONTEITH,BRENT N	12/03/1978	10		A
8	014946	MONTEITH,BRENT N	12/03/1978	10		A
9	014946	MONTEITH,BRENT N	12/03/1978	10		A
10	014946	MONTEITH,BRENT N	12/03/1978	10		A
11	014946	MONTEITH,BRENT N	12/03/1978	10		A
12	014946	MONTEITH,BRENT N	12/03/1978	10		A
13	016779	EDWARDS,TERRANCE J	07/01/1975	10		S
14	016822	MILLER,JASON D	03/29/1978	10		A
15	016839	GREEN,JAMES T	06/18/1981	10		A
16	017306	KIMBER,ANTONIO K	01/31/1977	10		A
17	017306	KIMBER,ANTONIO K	01/31/1977	10		A
18	018163	WRIGHT,JAMES	03/21/1980	10		A
19	018258	LA GRANT,ANTHONY C	12/20/1981	10		S
20	018259	LESTER,JASON	10/08/1978	10		A
21	018259	LESTER,JASON	10/08/1978	10		A
22	018305	HUGHES,BRIDGETTE	07/18/1984	10		A
23	018815	LEONARD SR,ANTWON	10/30/1975	10		A
24	018842	SCOTT,PERCIVAL	02/24/1976	10		S
25	018843	STEWART,JAMIE	12/23/1985	10		A
26	018858	IYAKAREMYE,MUJAJI	09/16/1976	10		A
27	018858	IYAKAREMYE,MUJAJI	09/16/1976	10		A
28	018884	BROWN,CURTIS L	11/04/1975	10		A
29	018964	RUIZ,JARELY M	02/08/1981	10		A
30	019160	BERGNER,DANIELLE M	12/25/1977	10		A
31	019279	POGORZELSKI,BRYAN	10/16/1981	10		A
32	019347	GOUZA,SHAWN	10/05/1983	10		A
33	019612	SHAHWAN,MOHAMED F	12/19/1977	10		A
34	019625	LOZANO,JORGE	03/05/1975	10		A
35	019627	RHODA,STEVEN	03/26/1989	10		A
36	019630	HUTCHINSON,MARQUIS	02/18/1975	10		A
37	019631	HOLMON,JACQUAY	09/21/1978	10		A
38	019632	CARSON JR,HAROLD T	02/02/1988	10		A
39	019652	MCDADE,VALERIAN	06/16/1975	10		A

Selection Criteria Order

You can re-order your selection criteria for a query so that the system first selects rows based on one field, next another, and so on. Re-ordering criteria can increase system efficiency.
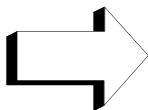
Re-ordering your criteria is simple. Click on the **Criteria** tab. Then click on the **Reorder Criteria** button. Type the numbers for the new order in the New Position column. Then click **OK**.

Edit Criteria Ordering

Reorder criteria by entering position numbers on the left. Rows left blank or assigned a 0 will be automatically assigned a position.

| Edit Criteria Ordering | | | Customize | Find | View All | 🖾 | 🏢 First ◁ 1-9 of 9 ▷ Last | |
|---|---|---|---|---|
| New Position | Position | Expression1 | Condition Type | Expression 2 |
| | 1 | A.EMPLID - Empl ID | equal to | B.EMPLID - Empl ID |
| | 2 | B.EFFDT - Effective Date | Eff Date <= | Current Date |
| | 3 | B.EMPLID - Empl ID | equal to | C.EMPLID - Empl ID |
| | 4 | B.EMPL_RCD - Empl Record | equal to | C.EMPL_RCD - Empl Record |
| | 5 | C.EFFDT - Effective Date | Eff Date <= | Current Date (EffSeq = Last) |
| | 6 | (A.BIRTHDATE - Date of Birth | not less than | :1 |
| | 7 | A.BIRTHDATE - Date of Birth | not greater than | :2) |
| 1 | 8 | B.BENEFIT_PLAN - Benefit Plan | equal to | :3 |
| 2 | 9 | C.EMPL_STATUS - Payroll Status | in list | ('A','L','P','S') |

[OK] [Cancel]
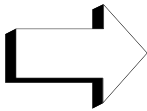
You may wish to re-save your query.
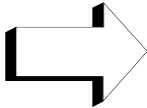
Since you have just saved the query that you have been building throughout this course, **DER_INFO_AGE_ACTIVE_DETAIL_V2**, why not pause for a moment and take a break! In a moment, you will create a brand-new query to review and practice some of the features you have learned so far as well as learn about a few nuances of Query.

In List

"**In list**" finds fields having values that match any one of the values in a list of values. With this option, you are prompted to create a list with the Edit List dialog box. You had an opportunity to use *in list* in Chapter 2.
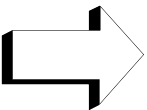
Key point to remember:
- From the Edit List dialog box, peruse the list of values, and click the **Add Value** button to add a value to the list.

Edit List

- When you have completed your list, click **OK**.

- Note that on occasion, if there is no list of values provided, you will enter values by typing them.

AND, AND NOT, OR, and OR NOT Operators

Take a moment now to read about additional operators. Additional operators are used to further define your criteria expressions. These include **AND**, **AND NOT**, **OR**, and **OR NOT**, and parentheses. When you add a criteria bar, the default logical is **AND**, meaning that both (or all) criteria must be true for a data row to be returned.

Note: Given the choice, it is always better to use the not version of a Condition Type rather than the **NOT** operator on the entire criterion. When you use **NOT**, Query cannot use SQL indexes to speed up the data search. When you use the **not** version of a Condition Type, Query can translate it into an SQL expression that enables it to use the indexes.

You can change the value of the logical operator to **AND NOT**, **OR**, or **OR NOT** by clicking in the drop-down list in the Logical column for a field.

Say you had added a row of selection criteria to ask for records where the EMPL_RCD number for an employee is either 0 (primary) or 1.

You can group rows of criteria to ask for very specific information from the database. You will use the **Group Criteria** button.

Parentheses are used to group and ungroup rows of selection criteria, and they control the order in which Query executes the criteria. To select several rows of criteria for grouping (or ungrouping), use the **Group Criteria** button. You will notice one set of parenthesis are used in the Criteria. Do not alter those. Instead, add an additional set for the appropriate fields shown in the example scree. Click **OK**.

Edit Criteria Grouping

Use the edit boxes to enter parenthesis for each criteria. Use only the '(' and ')' characters.

Edit Criteria Grouping					Customize | Find | 🔁 | ⊞ First ◀ 1-12 of 12 ▶ Last	
Logical	**Left Paren**	**Expression1**	**Condition Type**	**Expression 2**		**Right Paren**
		A.EMPLID - Empl ID	equal to	B.EMPLID - Empl ID		
AND		B.EFFDT - Effective Date	Eff Date <=	Current Date		
AND		B.EMPLID - Empl ID	equal to	C.EMPLID - Empl ID		
AND		B.EMPL_RCD - Empl Record	equal to	C.EMPL_RCD - Empl Record		
AND		C.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)		
AND	(	A.BIRTHDATE - Date of Birth	not less than	:1		
AND		A.BIRTHDATE - Date of Birth	not greater than	:2		)
AND		B.BENEFIT_PLAN - Benefit Plan	equal to	:3		
AND		C.EMPL_STATUS - Payroll Status	in list	('A','L','P','S')		
AND		B.PLAN_TYPE - Plan Type	in list	('50','51','52')		
AND	(	A.EMPLID - Empl ID	equal to	0		
AND		A.EMPLID - Empl ID	equal to	1		)

OK   Cancel

In this example, your output would list only those rows that meet these criteria:

- Rows for the Employee IDs from Record A equal to the employee IDs for Record B.
- *and* an effective date from Record B less than or equal to a current date
- Rows for the Employee IDs from Record B equal to the employee IDs for Record C.
- *and* an effective date from Record C less than or equal to a current date
- *and* birthdate from Record A between two parameter values input by the user to run the query. We used January 1, 1975 and December 31, 2000 in this example.
- *and* a benefit plan entered as a parameter by the user to run the query. We chose to leave this parameter blank.
- *and* an employee status in the list (values A , L, P and S)
- *and* an employee record number of *either* 0 or 1

It's time to write a new query from beginning to end.

EXERCISE – Create a New Query, Specifying Selection Criteria

You have been asked to create a query that displays all records for employees that are married.

STEPS …	USING …
1. Create a new query	• Main Menu > Reporting Tools > Query > **Query Manager** • Click the Create a New Query hyperlink.
2. Select the record	EMPLOYEE
3. Select fields for display, and place them in this column order	▪ EMPLID ▪ LAST_NAME ▪ FIRST_NAME ▪ MAR_STATUS
4. Verify the sort order for this field in ascending order. If not change it.	▪ LAST_NAME
5. Change the heading for these fields as shown if required. *Reminder: Use the **Edit** button.*	LAST_NAME ➔ Last Name FIRST_NAME ➔ First Name
6. Display the Long Description translate value for this field *Reminder: Use the **Edit** button.*	▪ MAR_STATUS

STEPS …	USING …
7. Enter selection criteria for this field	Expression 1 Condition type Expression 2 **MAR_STATUS** **equal to** **Married**

8. Preview your query results	Your results should be similar to the the next screen..

View

Perhaps instead of retrieving *all* married employees, you are interested in looking at only those which have less than a high school diploma or GED.You can modify your query to get a "short" list of high school graduates by adding selection criteria.

STEPS …	USING …
9. Add the field HIGHEST_EDUC_LVL	**Query** tab
10. Click on the **Criteria** tab to add selection criteria	**Criteria** tab
11. Use the Less than Condition Type to search for employees have not received a High School diploma or GED.	
12. Preview your query results	Your results should be similar to the next screen.

View All | Rerun Query | Download to Excel | Download to XML   First 1-100 of 3043 Last

	ID	Last	First Name	Mar Status	HI Educ Lv
1	018978	WALKER	STANLEY	Married	A
2	003285	RUSCH WALTON	SANDRA	Single	A
3	018398	ALLEN	JOHNNY	Single	A
4	018398	ALLEN	JOHNNY	Single	A
5	000026	SUTHERLAND	LAURA	Single	A
6	000170	KNICKERBOCKER	ANDREA	Married	A
7	000239	MC ATTEE	SALLY	Married	A
8	000871	ALVARADO	JOSEPH	Married	A
9	000926	VERFURTH	KATHLEEN	Single	A
10	000975	WHITTLEY	KATRINA	Single	A
11	018089	RAUCKMAN	KATHY	Divorced	A
12	019558	ZAMORA	CRISTOBAL	Married	A
13	000616	BENGSCH	MARY	Single	A
14	002243	WAGLER	ROBERT	Married	A
15	003638	PELKOWSKI	JOHN	Single	A
16	004235	LIEDTKE	SUSAN	Single	A
17	004729	CARPENTER	MICHAEL	Single	A
18	006877	MIGLIACCIO	PASQUALE	Married	A

As you can see this is a lot of people. However, the majority have a code of A which indicates the information was not provided. Therefore, if we want more accurate data on High School graduates or GED recepients we would need to collect the data and correct it in our system.

Now say that you wish to further refine your query to select rows with *either* a married *or* divorced marital status. Add a row of

selection criteria and group two of them using parentheses, as described in the following steps.

STEPS …	USING …
13. Make sure that you have the **Criteria** tab selected	**Criteria** tab
14. Add a row of selection criteria using the *equal* Condition Type	
15. Then use the **OR** logical between each of these rows of selection criteria *Hint: Use the **Reorder Criteria** button so that the two marital status criteria are together.*	Logical Expression 1 Condition type Expression 2 　　　MAR_STATUS equal M OR MAR_STATUS equal D
16. Add parentheses around these two rows *Hint: Use the **Group Criteria** button.*	Logical Expression 1 Condition type Expression 2 　　(MAR_STATUS equal M OR MAR_STATUS equal D)

Your criteria should look similar to this:
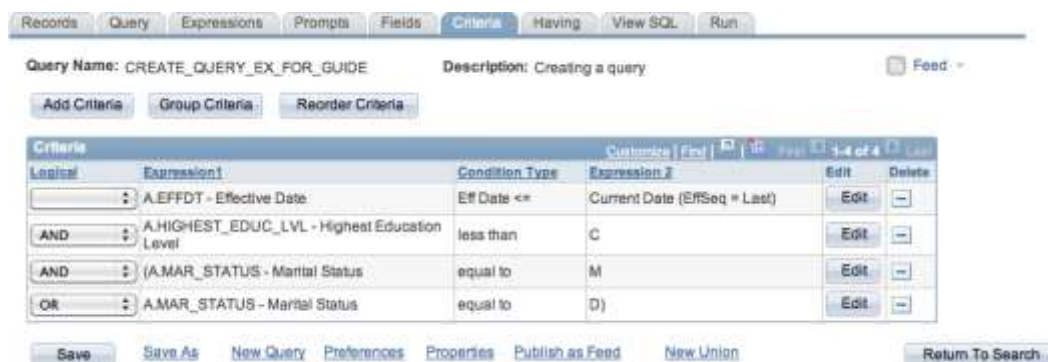
STEPS …	USING …
17.Preview your query results	Your results should be similar to the next screen.

Records   Query   Expressions   Prompts   Fields   Criteria   Having   View SQL   Run

View All | Rerun Query | Download to Excel | Download to XML   First 1-100 of 1452 Last

	ID	Last	First Name	Mar Status	HI Educ Lv
1	018978	WALKER	STANLEY	Married	A
2	000170	KNICKERBOCKER	ANDREA	Married	A
3	000239	MC ATTEE	SALLY	Married	A
4	000871	ALVARADO	JOSEPH	Married	A
5	018069	RAUCKMAN	KATHY	Divorced	A
6	019558	ZAMORA	CRISTOBAL	Married	A
7	002243	WAGLER	ROBERT	Married	A
8	006877	MIGLIACCIO	PASQUALE	Married	A
9	007339	HINKLE	BRIAN	Divorced	A
10	008612	COLE	CAMILLE	Married	A
11	017384	EDWARDS	TIMOTHY	Married	A
12	018284	KENNEDY	DAVID	Married	A
13	018840	REED	PETER	Divorced	A
14	002648	STEIN	MICHELLE	Married	A
15	003449	KAMLAH	KAREN	Married	A
16	004710	ROCHE-SANDERS	MARIA	Married	A
17	008946	GREENE	EDITH	Divorced	A
18	010876	KERR	ALAN	Married	A
19	018196	HONOLD	REYNOLDS	Married	A
20	019046	DEVEREAUX	NOLA	Married	A
21	002367	FERRILL	RONALD	Married	A

STEPS …	USING …
18.Re-save the query	Save

Run-Time Prompts

A run-time prompt allows you to enter values for a specific field at the time the query is executed, giving you more flexibility. The report will display only those rows of information that match the value entered at the prompt. The report will be different each time you run it, depending on what value(s) you enter at run time. Thus you can use the same basic report repeatedly to retrieve different data.

Build a new query so that you can practice with creating and using run-time prompts. You will be using the EMPLOYEES table again, seeking to create a list of active employees in your department, along with information about each person's job code, job title, union code

and bargaining unit. Each time you run the report, you want a different group of employees.

STEPS …	USING …
1. Create a new query.	Main Menu > Reporting Tools > Query > **Query Manager**
2. Select the record.	EMPLOYEES
3. Add the effective date criteria.	**OK**
4. Select fields, and have them display in this order.	- DEPTID - NAME - JOBCODE - JOBTITLE - UNION_CD - BARG_UNIT
5. Sort the output for this field in ascending order.	- DEPTID - NAME
6. Change the headings.	DEPTID ➔ Department BARG_UNIT ➔ Bargaining Unit
7. Enter the first two selection criteria. *See the special note, below*	- DEPTID, like, *first three characters of your org code+% example: 165%* - EMPL_STATUS, in list, ALPS - JOB_INDICATOR, equal to, P
8. Save the query.	**JOB_UNION_BU**

9. Add a fourth selection criterion.	UNION_CD, *equal to, … Then continue with instructions that follow …*

Note: Remember that you can use a field such as EMPL_STATUS or JOB_INDICATOR in your selection criteria without having to display it in your query.

Now you will set up the prompt on UNION_CD. As noted in Step 9 on the previous page, add the selection criterion for UNION_CD, selecting *equal to* for the condition and Prompt for Expression 2 Type.
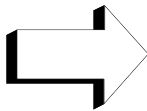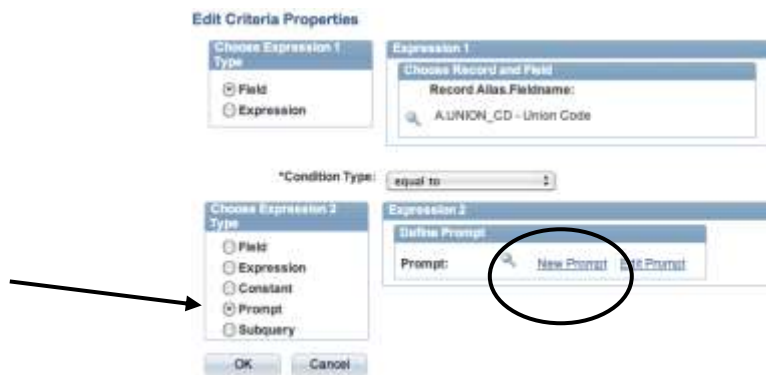
Then click on the <u>New Prompt</u> hyperlink. The first time you define a prompt in a report, you go directly into the Edit Prompt Properties page.

All of the information on this page defaults in. Each field is described in more detail below:

❶ Field: Field value defaults from the selection criteria bar.

❷ Heading Type:

|	
Rft Long	The long field name from the record definition.
Rft Short	The short field name from the record definition.
Text	Free-form text – enables you to assign your own label.

❸ Type, Format, Length & Decimals: Type, format, length, and decimals default from the field definition in the database.
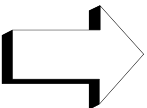
❹ Edit Type: The value in this field will default to *No Table Edit**, Prompt Table*, *Translate Table*, or *Yes/No Table*, depending on which field value is shown in Field.
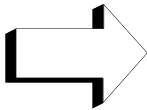
Click **OK** to confirm your Prompt Properties. Then click **OK** again. Notice in the screen print shown here that it is represented on the criteria page as :1.
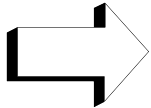
Click OK again to return to the **Criteria** screen.

Re-save your query and run it. When you do so, this dialog box pops up. This is where you enter the union code desired, or you may click on the 🔍 icon to search for a job code. Click on the 🔍 icon now.

JOB_UNION_BU

Union Code: [ ] 🔍

[OK]   [Cancel]

The Look Up Union Code page appears.
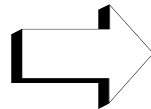
Click on the desired union code and click **OK**. You will then see the results of your query. (Union Code 6A should return rows.)

Remember, should you get 0 results, it does not necessarily mean that you made a mistake in building your query! It may simply mean that there are no rows that meet your selection criteria.

The next time you run this query, you may wish to view Staff Nurses Council employees or Non-management/Non-represented employees. Run-time prompts give you that flexibility.
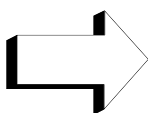
Click on the **Criteria** tab.

Multiple Prompts

If you wish to have more than one prompt in a query, you simply define additional prompts by simply adding another row of criteria.

Say you want to add ethnic group to the selection criteria as a run-time prompt. By modifying this query, you can have the system ask you for *two* values at run time.

Multiple Prompts
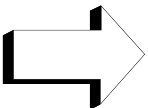
Add a prompt for ETHNIC_GROUP. To do so, add a criteria row for the field, using the condition *equal to* and Prompt for Expression 2. Click the New Prompt hyperlink. Then click **OK**, and then click **OK** again. Your resulting Criteria page will look like this:

Prompts can only be assigned once. If all of your prompt criteria are defined using the **AND** connector, then all your prompts are logically required.
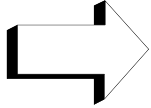
Run the query **JOB_UNION_BU**. Upon seeing the Query Results window, make a selection for the Union Code, and then make a selection from the Ethnic Group drop-down list.

JOB_UNION_BU

Union Code: 6A

Ethnic Grp: Black/African American

OK   Cancel

You should see results similar to those shown here:

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Union Code = 6A, Ethnic Grp=2

View All | Rerun Query | Download to Excel | Download to XML   First 1-3 of 3 Last

	Dept ID	Name	Job Code	Union Code	Barg Unit	Job Title
1	1652	MARIE PETTIGREW	0410DC	6A	6	PAY SERVICES SPECIALIST
2	1652	TAWAUNA SWANIGAN	0320DC	6A	6	ACCOUNTING ASSISTANT III
3	1654	MARY TURNER	0479DC	6A	6	OFFICE ASSISTANT III

The run-time prompts enable you to select different values every time you run the query.
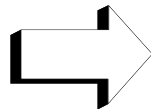
To manage your prompts, click on the **Prompts** tab.

| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Query Name: JOB_UNION_BU   Description: Used for 9.1 Guidebook   Feed

Add Prompt

Prompts List		Customize	Find		1-2 of 2	
Prompt		Edit	Delete
:1 = UNION_CD - Union Code		Edit	−
2 = ETHNIC_GROUP - Ethnic Grp		Edit	−

Save   Save As   New Query   Preferences   Properties   Publish as Feed   New Union   Return To Search

To delete a prompt, you would click on the ⊟ button.

Simple Aggregate Functions in Query

Using aggregate functions in Query gives you the ability to capture *summary* data in the Grid Control instead of *detailed* data rows.

Aggregate Function   An aggregate function is a pre-defined summary calculation in Query. It returns a single value for multiple rows of output. Operations that summarize data are these:

- **Avg** (Average)
- **Count**
- **Max** (Maximum)
- **Min** (Minimum)
- **Sum**
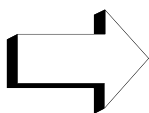
Open the query you created called **123**. Click on the **Criteria** tab, and delete the row(s) of criteria that ask for SHIFT status using the button button ▬ at the end of the appropriate row. Also delete the row of criteria that asks for ACTION. Your page should now look like this, with *your organization code(s)* listed:

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: 123   Description: FOR TNG   Feed

View field properties, or use field as criteria in query statement.   Reorder / Sort

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.DEPTID – Department	Char10				Dept ID	🔍	Edit	▬
2	A.EMPLID – Empl ID	Char11				ID	🔍	Edit	▬
3	A.EMPL_RCD – Empl Record	Num3.0				Empl Record	🔍	Edit	▬
4	A.JOBCODE – Job Code	Char6				Job Code	🔍	Edit	▬
5	A.REG_TEMP – Regular/Temporary	Char1		N		Reg/Temp	🔍	Edit	▬
6	A.FULL_PART_TIME – Full/Part Time	Char1		N		Full/Part	🔍	Edit	▬

Save   Save As   New Query   Preferences   Properties   Publish as Feed   New Union   Return To Search

Return to the **Fields** tab. Using the delete button ▬, de-select the following fields for display: EFFDT, EFFSEQ, SHIFT, ACTION, ACTION_DT, PER_ORG and LOCATION so that they do not display in your query results. These fields will remain:
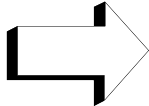
⇨ Save your query.

Simple Aggregate Functions in Query
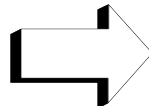
⇨ To calculate a count for the number of employees your, click on the Edit button to the right of the EMPLID field. You will see the Edit Field Properties dialog box shown here. Choose the type of calculation you want to perform, which in this case is Count. Click **OK**.

You will now see the word "Count" under the Agg column:

⇨

Now change the sort for the report: click the **Fields** tab, then the **Reorder/Sort** button. In the New Order By column, type a 2 to the right of JOBCODE. Click **OK.**

Click the **Run** tab for viewing.

Notice from the next screen print how the results look different from your earlier results. Fewer rows are returned, and in the **Count ID** column, a *count* is displayed rather than actual employee ID's.

| | Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

View All | Rerun Query | Download to Excel | Download to XML

First 1-59 of 59 Last

	Dept ID	Count ID	Empl Record	Job Code	Reg/Temp	Full/Part
1	5457	2	1	042861	R	F
2	5457	4	10	042861	R	F
3	5457	1	0	045361	R	F
4	5457	1	2	045361	R	F
5	5457	2	0	048061	R	F
6	5457	1	0	048861	R	F
7	5457	1	0	049361	R	F
8	5457	1	0	1015DC	R	F
9	5457	26	0	104161	R	F
10	5457	2	0	104161	R	S
11	5457	10	1	104161	R	F
12	5457	2	2	104161	R	F
13	5457	1	0	105061	R	F
14	5457	1	2	1419DC	R	F
15	5457	1	3	1419DC	R	S
16	5457	1	10	1419DC	R	F
17	5457	1	11	1419DC	R	F
18	5457	2	12	1419DC	R	F
19	5457	1	13	1419DC	R	F

You can gather from these results, for instance, that there are two employees who are regular fulltime employees working in jobcode 048061.

The EMPLID field has actually been redefined within the query as a summary field.

As mentioned, aggregate functions return a single value based on multiple rows of data. If only the field with the aggregate function is displayed in the output, Query will look at all the rows of data and perform the function based on every row. The output will be a single value.

EXERCISE – Create a Query, Using an Aggregate Function
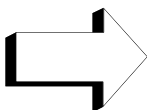
You have been asked to create a query to calculate a *count* of employees for each of your organization codes who have been *hired*, *rehired*, *promoted*, *transferred*, or received a *pay increase*.

STEPS …	USING …
1. Create a new query.	New Query
2. Select the record.	EMPLOYEES
3. Add the effective date criteria.	**OK**
4. Select fields for display, in this order.	▪ EMPLID ▪ ACTION ▪ DEPTID
5. Sort the output for this field in ascending order.	▪ DEPTID
6. Change the heading.	DEPTID ➔ Department
7. Enter the first two selection criteria.	▪ DEPTID, like, *first three characters of your org code+% example: 165%* ▪ ACTION, in list, HIR, PAY, PRO, REH, XFR
8. Using the **Edit** button for the EMPLID field, define your aggregate function (Count).	EMPLID ➔ Count (ID)
9. Click the **RUN** tab.	Your results should be similar to the Grid Control that follows.

Grid Control output:

	Count ID	Action	Department
1	1	REH	1652
2	1	XFR	1661
3	1	XFR	1652
4	2	PAY	1651
5	2	PRO	1654
6	3	XFR	1654
7	4	HIR	1652
8	5	PAY	1654
9	10	PAY	1652

View All | Rerun Query | Download to Excel | Download to XML   First 1-9 of 9 Last

The field EMPLID has now been re-defined within the query, and for each unique combination of fields selected for display, you see a count.

Next, from the **Fields** tab, de-select this field for display: ACTION by using the **Delete** button ⊟ .

Run your query again, and notice how few rows are retrieved:

	Count ID	Department
1	3	1651
2	10	1654
3	16	1652

View All | Rerun Query | Download to Excel | Download to XML   First 1-3 of 3 Last

The reason fewer rows are displayed is that you have lost the detail for the ACTION field. The numbers in the Count ID field shown above include *everyone* in each of these organizations who was *hired*, *rehired*, *promoted*, *transferred*, or received a *pay increase*. You do not know the breakdown with this type of a summary report.

Whether you choose to show detail or summary information depends on the purpose of the report.

Deleting Queries

From the main Query Manager menu, you can delete queries in addition to creating, opening, and renaming them.

Navigate accordingly: Main Menu > Reporting Tools > Query > **Query Manager**. Click Advanced Search to search for your Private queries.

Query Manager

Enter any information you have and click Search. Leave fields blank for a list of all values.

Find an Existing Query | Create New Query

Query Name: [begins with ⬍] [_____]
Description: [begins with ⬍] [_____]
Uses Record Name: [begins with ⬍] [_____]
Uses Field Name: [begins with ⬍] [_____]
Access Group Name: [begins with ⬍] [_____] 🔍
Folder Name: [begins with ⬍] [_____]

*Query Type: = [User ⬍]
Owner: = [Private ⬍]

When using the IN or BETWEEN operators, enter comma separated values without quotes. i.e. JOB,EMPLOYEE,JRNL_LN.

[Search] [Clear] Basic Search

Search Results

*Folder View: [-- All Folders -- ⬍]

[Check All] [Uncheck All]   *Action: [– Choose – ⬍] [Go]

| Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☐	123	FOR TNG	Private		Edit	HTML	Excel	XML	Schedule
☐	CREATE_QUERY_EX_FOR_GUIDE	Creating a query	Private		Edit	HTML	Excel	XML	Schedule
☐	CREATE_QUERY_GUIDE	Used for training	Private		Edit	HTML	Excel	XML	Schedule
☐	DER_INFO_AGE_ACTIVE_DETAIL_V2	Age info on Active EE Detail	Private		Edit	HTML	Excel	XML	Schedule
☐	JOB_UNION_BU	Used for 9.1 Guidebook	Private		Edit	HTML	Excel	XML	Schedule
☐	QUERY_EXERCISE_BASIC_QUERY	For training quide	Private		Edit	HTML	Excel	XML	Schedule
☐	RUN_TIME_TNG_EXAMPLE	Used for 9.1 Guidebook	Private		Edit	HTML	Excel	XML	Schedule

Find an Existing Query | Create New Query
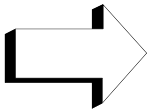
➡️ Locate one of the queries you created. Click the checkbox to the left of the query to be deleted. Now click the down arrow in the Action box. Select and click Delete Selected from the dropdown. When the **Go** button is clicked, another screen will appear asking for confirmation.

Message ✖

Confirm the permanent deletion of all selected queries? (139,191)

[Yes] [No]
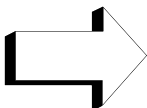
➡️ Clicking **Yes** will delete the query. You have the right to delete private queries, but not public queries.

Chapter Key Points

- For translate fields, you can display the short or long description rather than the code.

- Specify selection criteria using the **Query, Fields,** or **Criteria** tabs.

- Conditions allow you to compare fields of equal values, find values that are greater or less than the field, values in a list, values that are null, values like other values, values in a range, or values that exist in another query. With the like condition, you can use the wildcards **%** and **_**.

- You can compare a field to a constant, a field from another record, an expression, a subquery, or values entered in a run-time prompt.

- You can further define criteria expressions by the use of logical operators such as **AND**, **AND NOT**, **OR**, and **OR NOT**.

- You create run-time prompts to build flexibility into your queries. Each time you execute a query, the output data will be different based on the values you enter at the prompt(s).

- You can return a summarized value such as a Sum, Count, or Average using the aggregate function option.

- Deleting a query is a simple matter of selecting the query to be deleted and choosing Delete Selected using the Delete Selected option from the main Query Manager page.